

Notice of Allowability

Application No.

10/579,680

Applicant(s)

FUJIMOTO, KOJI

Examiner

Art Unit

ANDARGIE M. AYCHILLHUM

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/23/2009.
2. ☒ The allowed claim(s) is/are 18 and 20-32.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>15 July 2009</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/23/2009 has been entered.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Montague on **08/03/2009**.

The application has been amended as follows:

Claim 19 is cancel.

--Claim 18. (Currently amended) A surface mount composite electronic component, comprising:

an insulating substrate composed of a hexahedron; a circuit element formed on each

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surface_of a pair of opposed surfaces of the insulating substrate, the opposed surfaces disposed on lateral side surfaces of the insulating substrate, the lateral side surfaces being adjacent to top and bottom surfaces of the insulating substrate, the top and bottom surfaces having the largest surface areas of the insulating substrate, the circuit element on each of the opposed surfaces_comprising electrodes formed on the respective surfaces of the insulating substrate that the electrodes_also functioning as external terminals on the opposed surfaces of the insulating substrate; wherein the circuit element is composed of electrodes as well as resistor forming material or capacitor forming material that contact said electrodes, a nickel plate layer and a solder plate layer laid down, in that order, on the surfaces of external terminal areas of said electrodes. --

Allowable Subject Matter

4. Claims 18, 20-24 and 25-32 are allowed over the prior art of record.

Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance:

The prior art of record neither teach nor render obvious the instant application claimed invention as a whole, in particular, the prior art fails to teach "the opposed surfaces disposed on lateral side surfaces of the insulating substrate, the lateral side surfaces being adjacent to top and bottom surfaces of the insulating substrate, the top and bottom surfaces having the largest surface areas of the insulating substrate, wherein the circuit element is composed of electrodes as well as resistors forming

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material or capacitor forming material that contact said electrodes”, as recited in claim 18, or “the front and rear surfaces being adjacent to top and bottom surfaces of the insulating substrate, the top and bottoms surfaces having the largest surface areas of the insulating substrate, two first resistors disposed on the front surface of the insulating substrate so as to contact the first pair of electrodes and the first shared electrode; and two second resistors disposed on the rear surface of the insulating substrate so as to contact the second pair of electrodes and the second shared electrode” , as recited in claim 25.

Claims 20-24 and 26-32 are also allowed as being directly or indirectly dependent of the allowed base claims 18 and 25.

Relevant Art

6. Kim (2004/0090759 A1) teaches a multi-package module comprises a plurality of stacked packages including an upper package and a lower package. Each package comprises a board having located on a first side thereof a chip installation area and a bump pad area; at least one chip disposed in the chip installation area; a plurality of redistribution patterns formed on the board and electrically connected to the chip; and a plurality of first bump pads formed in the bump pad area which is electrically connected to the redistribution patterns. The respective packages are electrically connected by connecting bump pads of the upper package to bump pads of the lower package. Further, the chip installation area of the upper and lower packages not being in vertical alignment with each other.

David (US 7,269,025 B2) teaches in some embodiments, a multi chip package includes mounting pads to mount devices, such as integrated circuits, to a substrate, such as a printed circuit board, so that devices mutually placed on opposite surfaces of the substrate do not have interfering connections or connection vias. Other embodiments are described.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDARGIE M. AYCHILLHUM whose telephone number is (571)270-1607. The examiner can normally be reached on (Mon-Fri from 8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner
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/Dean A. Reichard/

Supervisory Patent Examiner, Art Unit 2841

A.A.
July 15, 2009